



## Air Emission Event Report Database Incident 383015

Export emission point and contaminant information to  Excel spreadsheet.

<b>Incident Tracking Number:</b>	383015	<b>Incident Status:</b>	CLOSED		
<b>Report Type:</b>	FINAL	<b>Report Date:</b>	07/25/2022		
<b>Name of Owner or Operator:</b>	INDORAMA VENTURES OXIDES LLC	<b>CN:</b>	CN605743038		
<b>Regulated Entity Name:</b>	PORT NECHES OPERATIONS	<b>RN:</b>	RN100219252		
<b>Physical Location:</b>	2701 SPUR 136; PORT NECHES, TX 77651				
<b>County:</b>	JEFFERSON				
<b>Event/Activity Type:</b>	EMISSIONS EVENT				
<b>Date and Time Event Discovered or Scheduled Activity Start:</b>	07/11/2022 07:57 AM				
<b>Date and Time Event or Scheduled Activity Ended:</b>	07/15/2022 03:09 PM				
<b>Event Duration:</b>	103 hours, 12 minutes				
<b>Process Unit or Area Common Names</b>					
F6 Unit					
<b>Facility Common Name</b>		<b>Facility Identification Number (FIN)</b>			
F6 Unit		F6 UNIT VENT			
<b>1 - Emission Point Common Name:</b>		<b>Emission Point Number:</b>			
F6 Unit Vent		F6FUG			
<b>List of Air Contaminant Compounds - 1 total</b>					
<b>Description</b>	<b>Est. Quantity/ Opacity</b>	<b>Units</b>	<b>Emission Limit</b>	<b>Units</b>	<b>Authorization</b>
Ethylene oxide	3121.3	POUNDS	0.0		No specific emissions authorizations for this vent
<b>Cause of Emission Event or Excess Opacity Event, or Reason for Scheduled Activity:</b>					
Ethylene oxide release from rupture disk mechanism on purification tower. Additionally, during the same time period a minor unrelated cycle water leak (minimal ethylene oxide content) from a machined clamp on F6 occurred.					
<b>Actions Taken, or Being Taken, to Minimize Emissions And/or Correct the Situation:</b>					
The tower was depressurized and cooled to stop the ethylene oxide venting on July 11, 2022. The clamp was repaired on July 15, 2022.					
<b>Basis Used to Determine Quantities and Any Additional Information Necessary to Evaluate the Event:</b>					
Engineering estimates					
<b>Initial Notification Date/Time:</b>	07/12/2022 01:33 PM		<b>Method:</b>	STEERS	
<b>Notification Jurisdictions:</b>	REGION 10 - BEAUMONT				
<b>Publication Status:</b>	VERIFIED BY A CUSTOMER				

## Air Emission Event Report Database Incident 382431

Export emission point and contaminant information to  Excel spreadsheet.


<b>Incident Tracking Number:</b>	382431	<b>Incident Status:</b>	CLOSED
<b>Report Type:</b>	FINAL	<b>Report Date:</b>	07/13/2022
<b>Name of Owner or Operator:</b>	INDORAMA VENTURES OXIDES LLC	<b>CN:</b>	CN605743038
<b>Regulated Entity Name:</b>	PORT NECHES OPERATIONS	<b>RN:</b>	RN100219252
<b>Physical Location:</b>	2701 SPUR 136; PORT NECHES, TX 77651		
<b>County:</b>	JEFFERSON		
<b>Event/Activity Type:</b>	EMISSIONS EVENT		
<b>Date and Time Event Discovered or Scheduled Activity Start:</b>	07/01/2022 12:11 PM		
<b>Date and Time Event or Scheduled Activity Ended:</b>	07/03/2022 09:00 PM		
<b>Event Duration:</b>	56 hours, 49 minutes		
<b>Process Unit or Area Common Names</b>			
A3 Unit			
F4 Unit			
F6 Unit			

F8 Unit					
G6 Unit					
PO/MTBE Unit					
<b>Facility Common Name</b>	<b>Facility Identification Number (FIN)</b>				
A3 Waste Heat Boiler	A3HA35&A3CA1				
Center Flare	UER046				
F4 Unit Vents					
F6 Unit Vents					
F8 Unit Vents					
G6 Unit Vent					
North Flare	UER044				
PO Ground Flare	POFLARE				
South Flare	UER037				
<b>1 - Emission Point Common Name:</b>			<b>Emission Point Number:</b>		
A3 WHB			A3HA35&A3CA1		
<b>List of Air Contaminant Compounds - 2 total</b>					
<b>Description</b>	<b>Est. Quantity/ Opacity</b>	<b>Units</b>	<b>Emission Limit</b>	<b>Units</b>	<b>Authorization</b>
Carbon Monoxide	1272.0	POUNDS	26.18	LBS/HR	19823
Nitrogen Oxides (NOx)	353.0	POUNDS	60.07	LBS/HR	19823
<b>2 - Emission Point Common Name:</b>			<b>Emission Point Number:</b>		
Center Flare			UER046		
<b>List of Air Contaminant Compounds - 15 total</b>					
<b>Description</b>	<b>Est. Quantity/ Opacity</b>	<b>Units</b>	<b>Emission Limit</b>	<b>Units</b>	<b>Authorization</b>
1,3-BUTADIENE	4.1	POUNDS	65.0	LBS/HR	NSR 19823
1-Butene	59.2	POUNDS	65.0	LBS/HR	NSR 19823
Benzene	24.1	POUNDS	65.0	LBS/HR	NSR 19823
Butane, N-	14.0	POUNDS	65.0	LBS/HR	NSR 19823
Carbon Monoxide	1200.0	POUNDS	94.9	LBS/HR	NSR 19823
Cis-2-butene	9.0	POUNDS	65.0	LBS/HR	NSR 19823
Ethylene (gaseous)	334.0	POUNDS	65.0	LBS/HR	NSR 19823
Isobutane	48.0	POUNDS	65.0	LBS/HR	NSR 19823
Nitrogen Oxides (NOx)	257.0	POUNDS	16.36	LBS/HR	NSR 19823
Opacity	100.0	% OPACITY	20.0	% OPACITY	NSR 19823
Pentane	38.0	POUNDS	65.0	LBS/HR	NSR 19823
Propane	16.0	POUNDS	65.0	LBS/HR	NSR 19823
Propylene (Propene)	45.0	POUNDS	65.0	LBS/HR	NSR 19823
Trans-2-butene	15.0	POUNDS	65.0	LBS/HR	NSR 19823
VOC( unspecified)	14.0	POUNDS	65.0	LBS/HR	NSR 19823
<b>3 - Emission Point Common Name:</b>			<b>Emission Point Number:</b>		
F4 Unit Vents					

List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	11667.0	POUNDS	0.0		NA
Ethylene oxide	1662.83	POUNDS	0.0		NA
4 - Emission Point Common Name:			Emission Point Number:		
F6 Unit Vents					
List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	28466.0	POUNDS	0.0		NA
Ethylene oxide	2078.45	POUNDS	0.0		NA
5 - Emission Point Common Name:			Emission Point Number:		
F8 Unit Vents					
List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	6378.0	POUNDS	0.0		NA
Ethylene oxide	5.91	POUNDS	0.0		NA
6 - Emission Point Common Name:			Emission Point Number:		
G6 Unit Vent					
List of Air Contaminant Compounds - 1 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene glycol	8.0	POUNDS	0.0		N/A
7 - Emission Point Common Name:			Emission Point Number:		
North Flare			UER044		
List of Air Contaminant Compounds - 11 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
1-Butene	6.0	POUNDS	65.0	LBS/HR	NSR 19823
Benzene	6.1	POUNDS	65.0	LBS/HR	NSR 19823
Carbon Monoxide	250.0	POUNDS	94.9	LBS/HR	NSR 19823
Ethylene (gaseous)	76.0	POUNDS	65.0	LBS/HR	NSR 19823
Isobutane	5.0	POUNDS	65.0	LBS/HR	NSR 19823
Nitrogen Oxides (NOx)	52.0	POUNDS	16.36	LBS/HR	NSR 19823
Opacity	100.0	% OPACITY	20.0	% OPACITY	NSR 19823
Pentane, N-	7.0	POUNDS	65.0	LBS/HR	NSR 19823
Propane	5.0	POUNDS	65.0	LBS/HR	NSR 19823
Propylene (Propene)	11.0	POUNDS	65.0	LBS/HR	NSR 19823
VOC( unspciated)	6.8	POUNDS	65.0	LBS/HR	NSR 19823
8 - Emission Point Common Name:			Emission Point Number:		
PO Ground Flare			POFLARE		
List of Air Contaminant Compounds - 7 total					

Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization		
Acetone	23.0	POUNDS	107.91	LBS/HR	NSR 20160		
Carbon Monoxide	2206.0	POUNDS	53.5	LBS/HR	NSR 20160		
Isobutene	1896.0	POUNDS	107.91	LBS/HR	NSR 20160		
Nitrogen Oxides (NOx)	305.5	POUNDS	10.31	LBS/HR	NSR 20160		
Propane	762.0	POUNDS	107.91	LBS/HR	NSR 20160		
Propylene (Propene)	535.0	POUNDS	107.91	LBS/HR	NSR 20160		
Propylene oxide	210.4	POUNDS	107.91	LBS/HR	NSR 20160		
<b>9 - Emission Point Common Name:</b>			<b>Emission Point Number:</b>				
South Flare			UER037				
<b>List of Air Contaminant Compounds - 7 total</b>							
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization		
Carbon Monoxide	3942.0	POUNDS	53.5	LBS/HR	NSR 19823		
Ethylene (gaseous)	2218.0	POUNDS	32.67	LBS/HR	NSR 19823		
Nitrogen Oxides (NOx)	736.0	POUNDS	10.31	LBS/HR	NSR 19823		
Opacity	100.0	% OPACITY	20.0	% OPACITY	NSR 19823		
Propane	61.0	POUNDS	32.67	LBS/HR	NSR 19823		
Propylene (Propene)	848.0	POUNDS	32.67	LBS/HR	NSR 19823		
VOC (unclassified)	1.0	POUNDS	32.67	LBS/HR	NSR 19823		
<b>Cause of Emission Event or Excess Opacity Event, or Reason for Scheduled Activity:</b>							
Loss of plant utilities led to plant shutdown during bad weather.							
<b>Actions Taken, or Being Taken, to Minimize Emissions And/or Correct the Situation:</b>							
Slowdown, stabilize, and shutdown process units.							
<b>Basis Used to Determine Quantities and Any Additional Information Necessary to Evaluate the Event:</b>							
Engineering calculations and process monitoring.							
<b>Initial Notification Date/Time:</b>	07/02/2022 12:09 PM		<b>Method:</b>	STEERS			
<b>Notification Jurisdictions:</b>	REGION 10 - BEAUMONT						
<b>Publication Status:</b>	VERIFIED BY A CUSTOMER						

## Air Emission Event Report Database Incident 375863

Export emission point and contaminant information to  **Excel spreadsheet.**

<b>Incident Tracking Number:</b>	375863	<b>Incident Status:</b>	CLOSED			
<b>Report Type:</b>	FINAL	<b>Report Date:</b>	03/23/2022			
<b>Name of Owner or Operator:</b>	INDORAMA VENTURES OXIDES LLC	<b>CN:</b>	CN605743038			
<b>Regulated Entity Name:</b>	PORT NECHES OPERATIONS	<b>RN:</b>	RN100219252			
<b>Physical Location:</b>	2701 SPUR 136; PORT NECHES, TX 77651					
<b>County:</b>	JEFFERSON					
<b>Event/Activity Type:</b>	EMISSIONS EVENT					
<b>Date and Time Event Discovered or Scheduled Activity Start:</b>	03/09/2022 11:45 AM					
<b>Date and Time Event or Scheduled Activity Ended:</b>	03/15/2022 07:45 PM					
<b>Event Duration:</b>	152 hours, 0 minutes					
<b>Process Unit or Area Common Names</b>						
A3 Unit						
F4 Unit						
F5 Unit						

F6 Unit					
F8 Unit					
Facility Common Name			Facility Identification Number (FIN)		
A3 Unit			A3FUG		
Center Flare			UER046		
F4 Unit					
F5 Unit			POFLARE		
F6 Unit					
F8 Unit					
North Flare			UER044		
South Flare			UER037		
1 - Emission Point Common Name:			Emission Point Number:		
A3 Vent			A3FUG		
List of Air Contaminant Compounds - 1 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	16000.0	POUNDS	10.0	LBS/HR	NSR 19823
2 - Emission Point Common Name:			Emission Point Number:		
Center Flare			UER046		
List of Air Contaminant Compounds - 25 total					

Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
1,3-BUTADIENE	1.48	POUNDS	65.0	LBS/HR	NSR 19823
1-Butene	9.3	POUNDS	65.0	LBS/HR	NSR 19823
Acetylene	0.35	POUNDS	65.0	LBS/HR	NSR 19823
Benzene	16.37	POUNDS	65.0	LBS/HR	NSR 19823
Butane, N-	1.87	POUNDS	65.0	LBS/HR	NSR 19823
Carbon Monoxide	764.3	POUNDS	53.59	LBS/HR	NSR 19823
Cis-2-butene	0.83	POUNDS	65.0	LBS/HR	NSR 19823
Dihydrogen Sulfide	0.25	POUNDS	65.0	LBS/HR	NSR 19823
Ethylbenzene	0.12	POUNDS	65.0	LBS/HR	NSR 19823
Ethylene (gaseous)	98.96	POUNDS	65.0	LBS/HR	NSR 19823
Isobutane	7.59	POUNDS	65.0	LBS/HR	NSR 19823
Isobutylene	0.41	POUNDS	65.0	LBS/HR	NSR 19823
Isoprene	0.11	POUNDS	65.0	LBS/HR	NSR 19823
Methyl Acetylene	0.07	POUNDS	65.0	LBS/HR	NSR 19823
Nitrogen Oxides (NOx)	159.82	POUNDS	16.36	LBS/HR	NSR 19823
Opacity	80.0	% OPACITY	20.0	% OPACITY	NSR 19823
Pentane	15.89	POUNDS	65.0	LBS/HR	NSR 19823
Propadiene	0.05	POUNDS	65.0	LBS/HR	NSR 19823
Propene	7.32	POUNDS	65.0	LBS/HR	NSR 19823
Propylene (Propene)	19.75	POUNDS	65.0	LBS/HR	NSR 19823
Styrene	1.71	POUNDS	65.0	LBS/HR	NSR 19823

Toluene	2.37	POUNDS	65.0	LBS/HR	NSR 19823
Trans-2-butene	1.47	POUNDS	65.0	LBS/HR	NSR 19823
Vinylacetylene	0.16	POUNDS	65.0	LBS/HR	NSR 19823
Xylene	0.13	POUNDS	65.0	LBS/HR	NSR 19823
3 - Emission Point Common Name:			Emission Point Number:		
F4 Unit Vents					
List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	1679.66	POUNDS	0.0		N/A
Ethylene oxide	0.22	POUNDS	0.0		N/A
4 - Emission Point Common Name:			Emission Point Number:		
F5 Flare			POFLARE		
List of Air Contaminant Compounds - 8 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Acetone	11.0	POUNDS	107.9	LBS/HR	NSR 20160
Carbon Monoxide	590.0	POUNDS	54.29	LBS/HR	NSR 20160
Isobutane	450.0	POUNDS	107.9	LBS/HR	NSR 20160
Nitrogen Oxides (NOx)	82.0	POUNDS	7.63	LBS/HR	NSR 20160
Propane	118.0	POUNDS	107.9	LBS/HR	NSR 20160
Propylene (Propene)	119.0	POUNDS	107.9	LBS/HR	NSR 20160
Propylene oxide	94.0	POUNDS	107.9	LBS/HR	NSR 20160
Tert Butanol	101.0	POUNDS	107.9	LBS/HR	NSR 20160
5 - Emission Point Common Name:			Emission Point Number:		
F6 Unit Vents					
List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	3135.63	POUNDS	0.0		N/A
Ethylene oxide	5064.44	POUNDS	0.0		N/A
6 - Emission Point Common Name:			Emission Point Number:		
F8 Unit Vents					
List of Air Contaminant Compounds - 2 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
Ethylene (gaseous)	9661.67	POUNDS	0.0		N/A
Ethylene oxide	2.69	POUNDS	0.0		N/A
7 - Emission Point Common Name:			Emission Point Number:		
North Flare			UER044		
List of Air Contaminant Compounds - 25 total					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
1,3-BUTADIENE	0.6	POUNDS	65.0	LBS/HR	NSR 19823
1-Butene	4.24	POUNDS	65.0	LBS/HR	NSR 19823

Acetylene	0.14	POUNDS	65.0	LBS/HR	NSR 19823
Benzene	6.43	POUNDS	65.0	LBS/HR	NSR 19823
Butane, N-	0.87	POUNDS	65.0	LBS/HR	NSR 19823
Carbon Monoxide	298.34	POUNDS	94.9	LBS/HR	NSR 19823
Cis-2-butene	0.42	POUNDS	65.0	LBS/HR	NSR 19823
Dihydrogen Sulfide	0.13	POUNDS	65.0	LBS/HR	NSR 19823
Ethylbenzene	0.05	POUNDS	65.0	LBS/HR	NSR 19823
Ethylene (gaseous)	40.93	POUNDS	65.0	LBS/HR	NSR 19823
Isobutane	3.45	POUNDS	65.0	LBS/HR	NSR 19823
Isobutylene	0.17	POUNDS	65.0	LBS/HR	NSR 19823
Isoprene	0.04	POUNDS	65.0	LBS/HR	NSR 19823
Methylacetylene	0.03	POUNDS	65.0	LBS/HR	NSR 19823
Nitrogen Oxides (NOx)	64.12	POUNDS	16.36	LBS/HR	NSR 19823
Opacity	80.0	% OPACITY	20.0	% OPACITY	NSR 19823
Pentane	6.42	POUNDS	65.0	LBS/HR	NSR 19823
Propadiene	0.02	POUNDS	65.0	LBS/HR	NSR 19823
Propane	2.96	POUNDS	65.0	LBS/HR	NSR 19823
Propylene (Propene)	8.17	POUNDS	65.0	LBS/HR	NSR 19823
Styrene	0.69	POUNDS	65.0	LBS/HR	NSR 19823
Toluene	0.94	POUNDS	65.0	LBS/HR	NSR 19823
Trans-2-butene	0.74	POUNDS	65.0	LBS/HR	NSR 19823
Vinylacetylene	0.07	POUNDS	65.0	LBS/HR	NSR 19823

Xylene	0.05	POUNDS	65.0	LBS/HR	NSR 19823
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<b>8 - Emission Point Common Name:</b>	<b>Emission Point Number:</b>
South Flare	UER037

<b>List of Air Contaminant Compounds - 13 total</b>					
Description	Est. Quantity/ Opacity	Units	Emission Limit	Units	Authorization
1,3-BUTADIENE	0.06	POUNDS	32.87	LBS/HR	NSR 19823
1-Butene	0.12	POUNDS	32.87	LBS/HR	NSR 19823
Acetylene	0.02	POUNDS	32.87	LBS/HR	NSR 19823
Butane, N-	0.06	POUNDS	32.87	LBS/HR	NSR 19823
Carbon Monoxide	9310.77	POUNDS	53.59	LBS/HR	NSR 19823
Ethylene (gaseous)	6697.16	POUNDS	32.87	LBS/HR	NSR 19823
Isobutane	0.45	POUNDS	32.87	LBS/HR	NSR 19823
Methylacetylene	0.02	POUNDS	32.87	LBS/HR	NSR 19823
Nitrogen Oxides (NOx)	1736.82	POUNDS	10.31	LBS/HR	NSR 19823
Opacity	80.0	% OPACITY	20.0	% OPACITY	NSR 19823
Propadiene	0.02	POUNDS	32.87	LBS/HR	NSR 19823
Propane	60.4	POUNDS	32.87	LBS/HR	NSR 19823
Propylene (Propene)	749.66	POUNDS	32.87	LBS/HR	NSR 19823

<b>Cause of Emission Event or Excess Opacity Event, or Reason for Scheduled Activity:</b>
At approximately 11:45 AM on 3/9/2022, a control valve failed at the A3 unit, causing multiple units to trip. Flaring occurred at this time as a result of the unit trips. Unstable steam and boiler feed water operations occurred as a result of the unit trips, which then caused a site wide shut down.

<b>Actions Taken, or Being Taken, to Minimize Emissions And/or Correct the Situation:</b>
Indorama safely shut down the process units. The cogeneration units and boilers have been started up successfully. Note that, although Unit F5's POFlare exceeded its emission limits for NOx, CO and VOC during this event, these unauthorized emissions did not equal or exceed any Reportable Quantity in any 24 hr period during the event. Additionally, Unit F4 also released unauthorized quantities of VOC during this event; however, these unauthorized emissions did not equal or exceed any Reportable Quantity in any 24 hr period during the event.

<b>Basis Used to Determine Quantities and Any Additional Information Necessary to Evaluate the Event:</b>
Emission quantities are determined by process knowledge and engineering estimates.

<b>Initial Notification Date/Time:</b>	03/10/2022 11:21 AM	<b>Method:</b>	STEERS
<b>Notification Jurisdictions:</b>	REGION 10 - BEAUMONT		
<b>Publication Status:</b>	VERIFIED BY A CUSTOMER		